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PATENT

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Daryl A. Albus

Applicant : Michael L. Roukes, et al.  
Application No. : 09/927,779  
Filed : August 9, 2001  
Title : ACTIVE NEMS ARRAYS FOR BIOCHEMICAL ANALYSES  
Grp./Div. : 2881  
Examiner : To be Determined  
Docket No. : 45129/RAG/C766

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## INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents  
Washington, D.C. 20231

Post Office Box 7068  
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October 15, 2001

Commissioner:

In compliance with the duty of disclosure under 37 CFR §§ 1.56, 1.97 and 1.98, and in accordance with the provisions in the Manual of Patent Examining Procedure §§ 609 and 707.05(b), enclosed is FORM PTO-1449 listing the references that are known to applicant. Copies of each of the listed references are enclosed. This filing is timely because it is made during one of the periods described in 37 CFR § 1.97(b).

It is respectfully requested that the listed references be considered in the examination of this application and identified on the list of references cited on the patent issuing for this application. Applicant also requests that an initialed copy of FORM PTO-1449 be entered in the application file and returned to applicant with the next communication from the Office in accordance with MPEP § 609.

Respectfully submitted,

CHRISTIE, PARKER &amp; HALE, LLP

By

John W. Peck, Ph.D.

Reg. No. 44,284

626/795-9900

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Enclosures: PTO-1449, w/references

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FORM PTO-1449

## INFORMATION DISCLOSURE

## STATEMENT BY APPLICANT

(use many sheets as necessary)

Attorney Docket Number	45129/JWP/C766
Application Number	09/927,779
Filing Date	August 9, 2001
Applicant(s)	Michael L. Roukes, et al.
Group Art Unit	2881
Examiner Name	To be Assigned

## U.S. PATENT DOCUMENTS

EXAMINER INITIALS	DOCUMENT NUMBER	ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIALS	DOCUMENT NUMBER	PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION	
						YES	NO

## OTHER DOCUMENTS

EXAMINER INITIALS	Include name of the author (in CAPITAL LETTERS), title of the article, title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
	CHUI, B.W., et al., "Independent detection of vertical and lateral forces with a sidewall-implanted dual-axis piezoresistive cantilever", Appl. Phys. Lett., 16 March 1998, pgs. 1388-1390, Vol. 72, No. 11, American Institute of Physics.
	BASELT, David R., et al., "A High-Sensitivity Micromachined Biosensor", Proceedings of the IEEE, April 1997, pgs. 672-680, Vol. 85, No. 4.
	BECK, R.G., et al., "GaAs/AlGaAs self-sensing cantilevers for low temperature scanning probe microscopy", Appl. Phys. Lett., 24 August 1998, pgs. 1149-1151, Vol. 73, No. 8, American Institute of Physics.
	BINNIG, G., et al., "Atomic Force Microscope", Physical Review Letters, 3 March 1986, pgs. 930-933, Vol. 56, No. 9.
	FLORIN, Ernst-Ludwig, et al., "Adhesive Forces Between Individual Ligand-Receptor Pairs", Science, 15 April 1994, pgs. 415-417, Vol. 264, American Association for the Advancement of Science.
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	LEVIN, Yu., "Internal thermal noise in the LIGO test masses: A direct approach", Physical

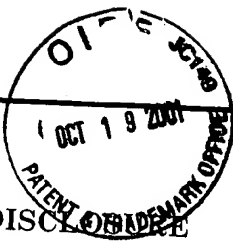
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**OTHER DOCUMENTS**

EXAMINER INITIALS	Include name of the author (in CAPITAL LETTERS), title of the article, title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
	Review D, 15 January 1998, pgs. 659-663, Vol. 57, No. 2, The American Physical Society.
	MEINERS, Jens-Christian, et al., "Direct Measurement of Hydrodynamic Cross Correlations between Two Particles in an External Potential", Physical Review Letters, 8 March 1999, pgs. 2211-2214, Vol. 82, No. 10, The American Physical Society.
	MOY, Vincent T., et al., "Intermolecular Forces and Energies Between Ligands and Receptors", Science, 14 October 1994, pgs. 257-259, Vol. 266, American Association for the Advancement of Science.
	SADER, John Elie, "Frequency response of cantilever beams immersed in viscous fluids with applications to the atomic force microscope", Journal of Applied Physics, 1 July 1998, pgs. 64-76, Vol. 84, No. 1, American Institute of Physics
	VIANA, Mario B., "Small cantilevers for force spectroscopy of single molecules", Journal of Applied Physics, 15 August 1999, pgs. 2258-2262, Vol. 86, No. 4, American Institute of Physics
	WHALEN, Anthony D., "Detection of Signals in Noise", Chapter 1. Probability, 1971, pgs. 1-26, Academic Press, New York.

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